ABSTRACT OF THE DISCLOSURE

An optical disk recording apparatus operates in a write mode for controlling a laser driver to alternate a laser power between a target write level and a target bottom level so as to write a signal at a constant density into an optical disk which is rotated at a constant angular velocity. A controller operates in the write mode for outputting a bottom level control signal according to a difference between an actual bottom level and the target bottom level. The controller operates in a pre-write mode prior to the write mode for performing a writing operation at different linear velocities along the optical disk to sample at least first and second bottom levels of the laser power, and operates in the write mode for monitoring a linear velocity at a point of the optical disk where the signal is to be recorded and for calculating a target bottom level at the monitored linear velocity by interpolation of the sampled first and second bottom levels, thereby outputting the bottom level control signal according to a difference between the calculated target bottom level and the actual bottom level of the laser power.